



# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>FAP-3881</b>	FOR FURTHER ACTION	See Form PCT/IPEA/416																								
International application No. <b>PCT/JP2004/005378</b>	International filing date (day/month/year) <b>15.04.2004</b>	Priority date (day/month/year) <b>16.04.2003</b>																								
International Patent Classification (IPC) or national classification and IPC																										
Applicant <b>BRIDGESTONE CORPORATION</b>																										
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> <p>4. This report contains indications relating to the following items:</p> <table border="0"><tr><td><input checked="" type="checkbox"/></td><td>Box No. I</td><td>Basis of the report</td></tr><tr><td><input type="checkbox"/></td><td>Box No. II</td><td>Priority</td></tr><tr><td><input type="checkbox"/></td><td>Box No. III</td><td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td></tr><tr><td><input type="checkbox"/></td><td>Box No. IV</td><td>Lack of unity of invention</td></tr><tr><td><input checked="" type="checkbox"/></td><td>Box No. V</td><td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VI</td><td>Certain documents cited</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VII</td><td>Certain defects in the international application</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VIII</td><td>Certain observations on the international application</td></tr></table>			<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
<input checked="" type="checkbox"/>	Box No. I	Basis of the report																								
<input type="checkbox"/>	Box No. II	Priority																								
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability																								
<input type="checkbox"/>	Box No. IV	Lack of unity of invention																								
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement																								
<input type="checkbox"/>	Box No. VI	Certain documents cited																								
<input type="checkbox"/>	Box No. VII	Certain defects in the international application																								
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application																								
Date of submission of the demand	Date of completion of this report																									
Name and mailing address of the IPEA/IP	Authorized officer																									
Facsimile No.	Telephone No.																									

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/005378

Box No. I

Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☒ the international application as originally filed/furnished
- ☐ the description:
- pages \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the claims:
- nos. \_\_\_\_\_ as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the drawings:
- sheets \_\_\_\_\_ as originally filed/furnished
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/005378

**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	2, 4-9, 11	YES
	Claims	1, 3, 10, 12-14	NO
Inventive step (IS)	Claims		YES
	Claims	1-14	NO
Industrial applicability (IA)	Claims	1-14	YES
	Claims		NO

## 2. Citations and explanations (Rule 70.7)

Document 1: JP 60-059063 A (Clarion Co., Ltd.), 05 April 1985

Document 2: JP 01-123067 A (Nihon Kentetsu Co., Ltd.), 16 May 1989

Document 3: JP 07-150356 A (Canon Inc.), 13 June 1995

Claims 1 and 3

The inventions set forth in claims 1 and 3 lack novelty in the light of document 1 cited in the international search report. Document 1 (claims) discloses a method for the production of a porous thin film by simultaneously sputtering a desired material and a metal material in order to form a mixed thin film, and thereafter removing only the metal material from the resulting mixed thin film by means of a plasma etching process. Therein, it is possible to infer that the porous thin film is configured from a ceramic material in the light of the applications that are disclosed therefor in document 1.

Claim 2

The invention set forth in claim 2 does not involve an inventive step in the light of document 1 cited in the

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/005378

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

international search report. The invention that is disclosed in document 1 employs a composite target; however, it would have been easy for a person skilled in the art to conceive of using two targets of different types.

Claims 10 and 12 to 14

The inventions set forth in claims 10 and 12 to 14 lack novelty in the light of document 2 cited in the international search report. Document 2 (examples) discloses a method for the production of a porous platinum film by sputtering a target that comprises both platinum and aluminum in order to form a mixed thin film, and thereafter immersing the resulting mixed thin film in an alkali solution in order to remove only the aluminum therefrom by means of elution.

Claim 11

The invention set forth in claim 11 does not involve an inventive step in the light of document 2 cited in the international search report. The invention that is disclosed in document 2 employs a composite target; however, it would have been easy for a person skilled in the art to conceive of using two targets of different types.

Claims 4 to 9

The inventions set forth in claims 4 to 9 do not involve an inventive step in the light of document 1 and document 2 cited in the international search report. In the light of the inventions that are disclosed in document 1 and document 2, it would have been easy for a

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/005378

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

person skilled in the art to conceive of producing a porous thin film by forming a mixed coating film that comprises a metal component (aluminum, zinc or the like) and a ceramic component, and thereafter immersing the resulting mixed coating film in an acidic solution or an alkali solution in order to remove the metal component therefrom by means of elution. In addition, a person skilled in the art could select Ti for use as the material that constitutes the ceramic component, as appropriate, with consideration of the material that should ultimately constitute the porous thin film. Furthermore, it would have been easy for a person skilled in the art to conceive of baking the porous ceramic film after removing the metal component by means of elution in an acidic solution or an alkali solution.